iaria-lite
An Unofficial IARIA LaTeX Class (Lite Version)

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Version 0.2

Abstract

The `iaria-lite`–class provides a convenient environment for writing IARIA scholary publications. (The lite version of the class file does not implement IARIA specifications for citation style, because this would require to make presumption about technological stacks like biblatex/biber). The `iaria-lite`–class should be compatible with with all latex distributions.

1   Installation

The `zip` or `tar.gz` file comes with a `iaria-lite.ins` and a `iaria-lite.dtx` file included which contains the LaTeX stuff.

To extract the class files call:

```
$ latex iaria-lite.ins
```

This call will extract all LaTeX specific files to the current directory. You can either use the files for a single cv project or you can integrate the files into your TeX installation.

If you just want to use iaria-lite for a single curriculum vitae project, the simplest way is just to copy the generated files to the folder of the project.

If you want to integrate iaria-lite into your TeX installation, create a directory `tex/latex/iaria-lite` beneath your TeX installation (e.g. beneath `/usr/share/texmf`) and copy all files from the current directory there. Now call:

```
$ mktexlsr
```

to update the file–cache of LaTeX.

Hint: The iaria-lite distribution contains a sample docstrip configuration in `docstrip.cfg` via which files can be distributed automatically to their correct positions inside a LaTeX installation. Feel free to adapt this file to your environment and afterwards call `latex iaria-lite.ins` to install the package to its right place.

2　Templates

For a quick start the iaria-lite distribution contains document templates. The templates can be found in the `iaria-lite-example-neumann.zip` file.

```
$ make
```

to build the pdf. The file `porttrait.eps` contains a dummy porttrait for the first page of the curriculum vitae.

3　Documentclass

`documentclass iaria-lite` This package provides the documentclass `iaria-lite`. The documentclass supports the following options:

- `conference` Passed to IEEEtran
- `a4paper` Passed to IEEEtran
- `flushend` Activate flushend package
- `pbalance` Activate pbalance package

4　Requirements

We instrument several other LaTeX packages for different purposes, which must be available under your installation.

- IEEEtran
- extdash
- flushend
- graphicx
- hyperref
- orcidlink
- pbalance
- times
- url
- xcolor
- xpatch

5   The Code

```
 1 @echo off
 2
 3 rem ***********************************************************************
 4 rem * author: Christoph P. Neumann
 5 rem ***********************************************************************
 6 cd /d "%~dp0"
 7
 8 echo == ..\examples\* ==
 9 for /D %%D in (..\examples\*) do (
10   echo == %%D ==
11   xcopy /Y ".\*.cls" "%%~D"
12 )
13
14 pause
15 %# Copyright (c) 2023 Christoph P. Neumann,
16
17 %# DISCLAIMER:
18 %# I had to decide whether to hardcode required usage of IEEEtran "conference" option into my
19 %# I decided against it.
20 %# Thus, it is required to use IARIA class like this: \documentclass[conference]{iaria}.
21 %# The iaria class passes all class options (like "conference") to IEEEtran.
22 %# The reasoning: There might be a future use case (speculatively) to pass IEEEtran options l
23 %# For now, IARIA requires IEEE "conference" option, only.
24
25 % Declare that this document class file requires at least LaTeX version 2e.
26 \NeedsTeXFormat{LaTeX2e}
27
28 % Provide the name of your document class, the date it was last updated, and a comment about
29 \ProvidesClass{iaria-lite}[2024/04/10 unofficial IARIA-lite conference template v0.2]
30
31 % Define marker counter for options (counter are global in latex):
32 \newcounter{iaria@pbalancetracker}
33 \newcounter{iaria@flushendtracker}
34
35 % Declare options:
36 \DeclareOption{onecolumn}{\OptionNotUsed} % IEEE option onecolumn will be ignored
37
38 \DeclareOption{pbalance}{
39   \setcounter{iaria@pbalancetracker}{1}
40   \typeout{iaria class: pbalance option is set.}
41 }
42 \DeclareOption{flushend}{
43   \setcounter{iaria@flushendtracker}{1}
44   \typeout{iaria class: flushend option is set.}
45 }
46
47 % We'll pass any document class options along to the underlying class
48 \DeclareOption*{%
49   \PassOptionsToClass{\CurrentOption}{IEEEtran}% required IEEE options: conference (for IARIA
50 }
51
52 % Now we'll execute any options passed in
```

```latex
53 \ProcessOptions\relax
54
55 % Instead of defining each and every little detail required to create a new document class,
56 % you can base your class on an existing document class.
57 \LoadClass{IEEEtran}
58
59 \RequirePackage{times} % Times New Roman
60
61 \RequirePackage{graphicx}
62 \RequirePackage{xcolor}
63
64 \RequirePackage{url}
65 \RequirePackage{orcidlink}
66 \RequirePackage{hyperref}
67 \hypersetup{hidelinks,unicode}
68
69 \makeatletter
70 % Diferring from IEEE, IARIA requires non-abbreviated references:
71 \renewcommand{\fnum@figure}{Figure~\thefigure}
72 % Diferring from IEEE, IARIA requires 14 point bold Times New Roman for the title
73 \renewcommand{\title}[1]{\renewcommand{\@title}{\bfseries\Large #1}}
74 % Diferring from IEEE, IARIA requires "Keywords" instead of "Index Terms":
75 \renewcommand\IEEEkeywordsname{Keywords}
76 \makeatother
77
78 \RequirePackage{xpatch}
79 % Diferring from IEEE, IARIA requires a hyphen after "Keywords" instead of an  emdash:
80 \xpatchcmd\IEEEkeywords{---}{-}{}{}
81
82 % Diferring from IEEE, IARIA requires also the keywords in Italic (and Bold)(and lower case!)
83 \let\oldIEEEkeywords\IEEEkeywords
84 \def\IEEEkeywords{\oldIEEEkeywords\itshape\ignorespaces}
85
86 \makeatletter
87 \renewcommand{\IEEEauthorblockN}[1]{%
88 % copied from IEEEtran.cls:
89     \relax\@IEEEauthorblockNstyle% set the default text style
90     \gdef\@IEEEauthorblockXinterlinespace{0pt}% disable strut for spacer row
91     % the \expandafter hides the \cr in conditional tex, see the array.sty docs
92     % for details, probably not needed here as the \cr is in a macro
93     % do a spacer row if needed
94     \if@IEEEprevauthorblockincol\expandafter\@IEEEauthorblockNtopspaceline\fi
95     \global\@IEEEprevauthorblockincoltrue% we now have a block in this column
96     %restore the correct strut value
97     \gdef\@IEEEauthorblockXinterlinespace{\@IEEEauthorblockNinterlinespace}%
98     % input the author names
99     \large
100    #1%
101    % end the row if the user did not already
102    \crcr}
103 \makeatother
104
105 % IARIA subfigure captions require this:
106 \RequirePackage[caption=false,font=footnotesize]{subfig}
```

```
107
108 % IARIA requires to bring the table caption in the same line of "Table I"
109 \usepackage{etoolbox}
110 \makeatletter
111 \patchcmd{\@makecaption}
112   {\\}
113   {.\ }
114   {}
115   {}
116 \makeatother
117
118 % Balance/level columns at the last page / in bibliography
119 % DISCLAIMER: No solution is a 100%/perfect one!
120 % Mainstream option: pbalance (see https://ctan.org/pkg/pbalance)
121 % BUT: incompatible with arxiv automated process (!)
122 \ifnum\value{iaria@pbalancetracker}=1
123   \typeout{iaria class: load pbalance package.}
124   \RequirePackage{pbalance}
125 \fi
126 % Flushend => works with arxiv, but major incampatibility with lineno (and, thus, also with m
127 \ifnum\value{iaria@flushendtracker}=1
128   \typeout{iaria class: load flushend package.}
129   \RequirePackage{flushend}
130 \fi
131
132 % Finally, we'll use \endinput to indicate that LaTeX can stop reading this file. LaTeX will
133 \endinput
```